

AMENDMENT TO THE CLAIMS:

1. (Original) A method for preparing copolymers of styrene and maleimide, comprising the steps of:

(i) blending copolymers of styrene and maleic anhydride with an imidizing agent in a supercritical state; and

(ii) removing residual amines and by-products.

2. (Original) A method for preparing copolymers of styrene and maleimide, comprising the steps of:

(i) blending copolymers of styrene and maleic anhydride with an imidizing agent and supercritical carbon dioxide; and

(ii) removing residual amines and by-products.

3. (Original) A method for preparing copolymers of styrene and maleimide, comprising the steps of:

(i) blending copolymers of styrene and maleic anhydride with an imidizing agent in a supercritical state and supercritical carbon dioxide; and

(ii) removing residual amines and by-products.

4. (Currently Amended) The method according to ~~any one of claims 1 to 3 claim~~ 1, wherein the copolymers of styrene and maleic anhydride used in step (i) comprise 5-50 wt% of maleic anhydride monomer and 95-50 wt% of styrene monomer, and have a weight average molecular weight of 5,000 to 300,000.

5. (Currently Amended) The method according to ~~any one of claims 1 to 3~~ claim 1, wherein the imidizing agent is ammonia or primary amines.

6. (Currently Amended) The method according to ~~claims 1 or 3~~ claim 1, wherein the imidizing agent in a supercritical state is obtained by introducing the imidizing agent into a blending zone having conditions under which the imidizing agent transforms into a supercritical state, in step (i).

7. (Original) The method according to claim 6, wherein the imidizing agent is introduced under a pressure of 700 psi to 2,000 psi.

8. (Currently Amended) The method according to ~~claim 2 or 3~~, wherein the supercritical carbon dioxide is obtained by introducing carbon dioxide into a blending zone having conditions under which carbon dioxide transforms into a supercritical state, in step (i). claim 1, wherein the imidizing agent is used in the amount of 0.8 to 2 moles per mole of maleic anhydride in the copolymers of styrene and maleic anhydride, in step (i).

9. (Currently Amended) The method according to ~~claim 8, wherein carbon dioxide is introduced under a pressure ranged from 2,000 psi to 7,000 psi~~ claim 6, wherein the pressure in the blending zone is 700 psi to 2,000 psi and the temperature in the blending zone is 150°C to 320°C, in step (i).

10. (Currently Amended) The method according to ~~any one of claims 1 to 3, wherein the imidizing agent is used in the amount of 0.8 to 2 moles per mole of maleic~~

~~anhydride in the copolymers of styrene and maleic anhydride, in step (i) claim 1, wherein the temperature is set to 300°C to 320°C after carrying out step (i).~~

11. (Currently Amended) The method according to ~~any one of claims 1 to 3,~~ wherein the pressure in the blending zone is ~~700 psi to 2,000 psi and the temperature in the blending zone is 150°C to 320°C, in step (i) claim 1, wherein step (ii) is carried out by using a depressurization device.~~

12. (Currently Amended) The method according to ~~any one of claims 1 to 3,~~ wherein the temperature is set to ~~300°C to 320°C after carrying out step (i) claim 2, wherein the copolymers of styrene and maleic anhydride used in step (i) comprise 5-50 wt% of maleic anhydride monomer and 95-50 wt% of styrene monomer, and have a weight average molecular weight of 5,000 to 300,000.~~

13. (Currently Amended) The method according to ~~any one of claims 1 to 3,~~ wherein step (ii) is carried out by using a depressurization device ~~claim 2, wherein the imidizing agent is ammonia or primary amines.~~

14. (New) The method according to claim 2, wherein the supercritical carbon dioxide is obtained by introducing carbon dioxide into a blending zone having conditions under which carbon dioxide transforms into a supercritical state, in step (i).

15. (New) The method according to claim 14, wherein carbon dioxide is introduced under a pressure ranged from 2,000 psi to 7,000 psi.

16. (New) The method according to claims 2, wherein the imidizing agent is used in the amount of 0.8 to 2 moles per mole of maleic anhydride in the copolymers of styrene and maleic anhydride, in step (i).

17. (New) The method according to claim 2, wherein the pressure in the blending zone is 700 psi to 2,000 psi and the temperature in the blending zone is 150°C to 320°C, in step (i).

18. (New) The method according to claim 2, wherein the temperature is set to 300°C to 320°C after carrying out step (i).

19. (New) The method according to claim 2, wherein step (ii) is carried out by using a depressurization device.

20. (New) The method according to claim 3, wherein the copolymers of styrene and maleic anhydride used in step (i) comprise 5-50 wt% of maleic anhydride monomer and 95-50 wt% of styrene monomer, and have a weight average molecular weight of 5,000 to 300,000.

21. (New) The method according to claim 3, wherein the imidizing agent is ammonia or primary amines.

22. (New) The method according to claim 3, wherein the imidizing agent in a supercritical state is obtained by introducing the imidizing agent into a blending zone having conditions under which the imidizing agent transforms into a supercritical state, in step (i).

23. (New) The method according to claim 22, wherein the imidizing agent is introduced under a pressure of 700 psi to 2,000 psi.

24. (New) The method according to claim 3, wherein the supercritical carbon dioxide is obtained by introducing carbon dioxide into a blending zone having conditions under which carbon dioxide transforms into a supercritical state, in step (i).

25. (New) The method according to claim 24, wherein carbon dioxide is introduced under a pressure ranged from 2,000 psi to 7,000 psi.

26. (New) The method according to claim 3, wherein the imidizing agent is used in the amount of 0.8 to 2 moles per mole of maleic anhydride in the copolymers of styrene and maleic anhydride, in step (i).

27. (New) The method according to claim 22, wherein the pressure in the blending zone is 700 psi to 2,000 psi and the temperature in the blending zone is 150°C to 320°C, in step (i).

28. (New) The method according to claim 3, wherein the temperature is set to 300°C to 320°C after carrying out step (i) .

29. (New) The method according to claim 3, wherein step (ii) is carried out by using a depressurization device.